

# 12<sup>th</sup> Biennial Conference of the International Society for Ecological Economics ISEE 2012: *ECOLOGICAL ECONOMICS AND RIO +20 CONTRIBUTIONS AND CHALLENGES FOR A GREEN ECONOMY*

## PANEL SESSION Constraints and Synergies between International and National Conservation Policies

June 17, 2012 at 9:00 - 10:30 am

# Economic Instruments for Biodiversity and the EU State Aid Regulation

Elina Raitanen<sup>1</sup>, Jukka Similä<sup>2</sup>, Kristian Siikavirta<sup>3</sup>, Eeva Primmer<sup>2</sup>

<sup>1</sup> Turku University, Turku, Finland

<sup>2</sup> Finnish Environment Institute, Helsinki, Finland

<sup>3</sup> Vaasa University, Vaasa, Finland

## 1 Introduction

There is a pressing need for developing new instruments to safeguard biodiversity and ecosystem services. Despite the numerous policies that have been developed during the long history of nature conservation, the attempts have turned out to be ineffective in stopping the loss of biodiversity. Because many environmental services are not traded in markets, but are rather public goods, their supply cannot easily be channelled by the market forces.<sup>1</sup> Instead, the market driven natural resource and land use changes lead to underinvestment in the public goods relative to what would be socially desirable. Regulatory instruments may not provide a sufficient basis for active biodiversity conservation because of their constraining and de-motivating character<sup>2</sup>. Nor do they encourage public participation or innovation, but may even inadvertently discourage people from practising good stewardship and generate strong opposition among the affected groups. In contrast to this kind of restriction, financial instruments function as incentives for conservation (or disincentives for damaging)<sup>3</sup>. They are designed to modify behaviour by encouraging private individuals, organisations and businesses to participate actively in conservation or at least refrain from damaging biodiversity<sup>4</sup>. Since nation states are ultimately responsible for providing public

---

<sup>1</sup> Arentino, Barbara—Holland, Paula—Matysek, Anna—Peterson, Deborah (2001): Cost Sharing for Biodiversity Conservation: *A Conceptual Framework*, Productivity Commission Staff Research Paper, AusInfo, Canberra. Available at: [http://www.pc.gov.au/\\_data/assets/pdf\\_file/0005/8294/csbc.pdf](http://www.pc.gov.au/_data/assets/pdf_file/0005/8294/csbc.pdf).

<sup>2</sup> Ring and Schröter-Schlaack, 2011. Ring, I., Schröter-Schlaack, C. 2011. Instrument Mixes for Biodiversity Policies POLICYMIX - Assessing the role of economic instruments in policy mixes for biodiversity conservation and ecosystem services provision Report, Issue No. 1/2011. [policymix.nina.no](http://policymix.nina.no)

<sup>3</sup> Ibid.

<sup>4</sup> Pannell, D.J., 2008. Public benefits, private benefits, and policy intervention for land-use change for environmental benefits. *Land Economics* 84, 225–240.

goods and hence also protecting biodiversity<sup>5</sup>, it can be claimed that the society should meet some costs of the conservation on behalf of the private actors by granting aid for landowners who voluntarily commit themselves to biodiversity conservation and that actually, this aid could generate a positive motivation to participate and innovate among the land-owners.

However, the competition rules of the European Union restrict the use of economic instruments, or 'state aid' as defined in the Treaty on the Functioning of the European Union (TFEU). The rules on state aid define how aid and other benefits are granted to undertakings. State aid is forbidden if it is granted selectively to certain undertakings or the production of certain goods, if it distorts competition or threatens to do so and if it affects the trade between the EU Member States. However, some aid, e.g. for socially warranted purposes or for restoring damage caused by natural disasters, are exempted from this prohibition, and the European Commission has the power to grant exemptions to promote certain goals of common interest of the EU. Environmental protection is this type of a common interest goal, where aid would be used to correct the failure of markets to provide a public good, like biodiversity.

Although environmental protection is a legitimate ground for state aid, the terms under which it may be granted are not necessarily environmentally effective, nor economically efficient. This is because state aid is based only on the income losses and additional costs. Since maintaining or increasing biodiversity values generates no income for the landowner, biodiversity values cannot be compensated for by the state. For this reason, those landowners who possess the most valuable sites for biodiversity conservation may not find it compelling to make conservation commitments. Actually, sites with poorer diversity could be offered for protection because payments for such sites may be relatively higher than payments for ecologically more valuable, economically less productive sites.

This article will analyse the regulatory frames under which economic incentives may constitute state aid in the meaning of 107 TFEU and the terms and conditions on which these aids may be granted to land-owners. We use the Finnish Funding for Sustainable Forestry as well as some other instruments as examples to examine the influence of the European State Aid Law for the development of national biodiversity conservation regulation. We will identify ways to develop EU and national policies to include nature values in legitimate state aids.

The paper is structured as follows. First we present the key rules on the definition of state aid and environmentally relevant derogation from the rule. State aid might significantly affect the design of economic instruments, but this does not apply to all instruments. Second, we go through a set of environmental policy instruments to review the relevance of the state aid rules for these instruments. Thirdly, we analyse the two key types of economic instruments that are both problematic from the state-aid law point of view and extremely relevant for biodiversity conservation policy. Finally, we draw conclusions based on the analysis and discussion.

---

<sup>5</sup> The Convention on biological diversity, United Nations 1992.

## 2 State Aid Regulation

### 2.1 Definition of State Aid

The key idea behind EU's competition policy and one of the primary objectives of the EU Treaty is that free markets would provide the best guarantee for improving citizens' living conditions in the EU. According to this idea, subsidies can reduce economic welfare by allowing the inefficient firms to succeed at the expense of the more efficient. The resulting distortions of trade can lead to friction between Member States and to costly retaliatory measures. Furthermore, unless some supranational discipline is imposed, competition between governments to attract investment can lead to a subsidy race. The EU control system, based on an agreed set of principles anchored in the Treaties therefore aims at ensuring the benefits of economic integration.<sup>6</sup> For unjust and selective advantages (e.g. direct grants and payments) to some undertakings decelerate the function of market forces, cause disorder in the common market *state aid* in the meaning of Article 107(1) TFEU is principally prohibited by the competition rules of the European Union.

Free markets do not always provide optimal solution for societal problems due to various reasons. Hence, state aid may be declared compatible with the Treaty, provided it fulfils clearly defined objectives of common interest, such as services of general economic interest, regional and social cohesion, employment, research and development, environmental protection or the protection and promotion of cultural diversity.<sup>7</sup> State aid measures can correct market failures through internalizing externalities and thereby improve the functioning of markets and enhance European competitiveness. In addition to being justified as such, environmental protection may also be considered a source of competitive advantage for Europe.

Article 107 TFEU regulates generally the prohibition of state aid and possible exceptions. The first part (107(1)) says:

*Save as otherwise provided in the Treaties, any aid granted by a Member State or through State resources in any form whatsoever which distorts or threatens to distort competition by favoring certain undertakings or the production of certain goods shall, insofar as it affects trade between Member States, be incompatible with the common market.*

The first legal consequence of a measure being a grant of aid within the meaning of Article 107(1) TFEU is that it has to be notified to the European Commission according to Article 108(1). State aid may receive Commission approval without notification on the basis that it fits within an already notified and approved general aid scheme or so called "block exemption" Regulation<sup>8</sup>. The state aid rules also treat previously "existing aid"<sup>9</sup> differently from aid granted after a member state signs up. The difference is that existing aid is presumed lawful unless the Commission challenges it, whereas "new aid" is illegal until the European Commission approves it. Consequently the aid is illegal if it is granted without the Commission being informed or without its approval. A Member State is not

---

<sup>6</sup> Buelens—Garnier—Johnson—Meiklejohn 2007, p. 2.

<sup>7</sup> State Aid Action Plan, COM(2005) 107 final.

<sup>8</sup> Commission Regulation (EC) No 800/2008 (6.8.2008).

<sup>9</sup> Aid existing before Member State joined the Union.

allowed to implement the proposed measure before the Commission has taken a final decision in its favour. This so-called “stand still clause” is directly effective<sup>10, 11</sup>.

Before considering the question under what circumstances the Commission may consider new state aid compatible with the common market, it is important to define whether the measure in question is to be regarded state aid according to the Treaty. For this, it is necessary to understand the precise boundaries of state aid. The case law of the European Court of Justice tells that the term “aid” must be interpreted broadly<sup>12</sup>. However, there is no exhaustive definition for state aid in EU law. That is why the definition must eventually be made on a case by case basis.

According to settled case-law, four cumulative conditions must exist for a state measure to be classified as state aid<sup>13</sup>. The aid must:

1. be granted by a Member State or through state resources;
2. favour certain undertaking or the production of certain goods;
3. distort or threaten to distort competition; and
4. affect trade between Member States.

Though state aid is basically prohibited under Article 107(1), paragraphs 2 and 3 of define the exemptions under which aid measures can be authorised. Member States cannot themselves assess the eligibility for aid, but a prior notification procedure is applied. Over the past tens of years, lot of secondary legislation and guidelines has grown up in order to give practical application to these exemptions. The rules must evolve to keep pace with economic and technological change, with the emergence of new political priorities. The increased emphasis placed on the protection of the environment over the last decade is an illustrative example of evolving political priorities.<sup>14</sup>

Articles 107(2) and (3) enable aids that foster the growth of economy, competition and function of the common market, if such effects can be formulated. Regulation also allows aid as an instrument for public policy. The idea is that beneficial aids should be permitted<sup>15</sup>. Article 107(2) lists the types of aids compatible as such and has little environmental relevance, exempt from the point 107(2)(b) “*aid to make good the damage caused by natural disasters or exceptional occurrences*”. In a case concerning the floods caused by the River Maas in the south-east of the Netherlands, aid was approved under the natural disaster or exceptional occurrence provision of that Article.<sup>16</sup> Also State aid N: o N 102/01 – *Finland Draft Decree of the Council of Ministers on compensation to fishermen for losses caused by seals* was justified on the ground of the Article 107(2)(b). The purpose of the draft Decree was to grant aid to fishermen for the catch losses caused by seals in 2000 and 2001 and it embraced partial compensation for proven catch losses, less a fixed amount to

---

<sup>10</sup> Case 47/69 *Steinike & Weinlig* [1977] ECR 595.

<sup>11</sup> *Jans—Vedder* 2008, p. 288–289.

<sup>12</sup> *Jans—Vedder* 2008, p. 289.

<sup>13</sup> Case C-280/00, *Altmark Trans GmbH* [2003] ECR I-07747.

<sup>14</sup> *Buelens—Garnier—Johnson—Meiklejohn* 2007, p. 2.

<sup>15</sup> *Siikavirta* 2007, p. 114.

<sup>16</sup> XXIVth Competition Report, point 354.

be borne by the fisherman<sup>17</sup>. However, due to the pressure from the Commission, Finland decided not to make the regulation permanent, although the need for it persisted. The dispute concerning the population sizes of fish and seals is still acute.

Article 107(3) stipulates the grounds for discretionary exemption to the ban on state aid. In the light of the integration principle such exemptions should be interpreted in an environmentally friendly way<sup>18</sup> for the requirements of environmental protection need to be integrated into the definition and implementation of competition policy, particularly in order to promote sustainable development. Two grounds for exemptions are essentially relevant for environmental state aid: Article 107(3)(b) "*aid to promote the execution of an important project of common European interest or to remedy a serious disturbance in the economy of a Member State*"<sup>19</sup> and, topmost, Article 107(3)(c) "*aid to facilitate the development of certain economic activities or of certain economic areas, where such aid does not adversely affect trading conditions to an extent contrary to the common interest*". Additionally, when assessing aid in fields other than that of the environment, the Member States should take environmental effects of aid into account. Equally, aid for projects which entail disproportionate effects for the environment should be avoided. It is the responsibility of the Member States to show that the aid benefits the environment.

Generally, all aid distorts competition. Yet, the state aid rules aim to defend potential foreign competitors and hence an economic activity which is purely local in nature<sup>20</sup> does not fall into the definition of state aid. When either the undertaking or other actors of the sector trade across Member States, the state aid laws apply. In addition to this, whether the measure in question is state aid in the meaning of Article 107(1) depends on the conditions of selectivity and of whether the aid is granted by the state or through state resources.

---

<sup>17</sup> Pursuant to point 2.9.3. (Aid to make good damage caused by natural disaster or exceptional occurrences) of the guidelines for the examination of state aid to fisheries and aquaculture (OJ C N:o 19, 20.1.2001, p 7): "According to article [107(2)(b) of TFEU], aid to make good damage caused by natural or exceptional occurrences is deemed to be compatible with the common market". Pursuant to Council Directive 92/43/EEC ringed seal and gray seal are protected species. The aid was thus justified on the exception grounds (article 16) of that directive. Accordingly, "provided that there is no satisfactory alternative and the derogation is not detrimental to the maintenance of the populations of the species concerned at a favourable conservation status in their natural range, Member States may derogate from the provisions-- to prevent serious damage, in particular to crops, livestock, forests, fisheries and water and other types of property--". From that aspect, and foremost taking into account the exceptional increase of the seal population, the hunting prohibition of the seals and the size of the damage caused, there was a reason to assume that the aid was meant to compensate the damage caused by natural disaster.

<sup>18</sup> *Jans—Vedder* 2008, p. 295.

<sup>19</sup> The Court held, in the Case 62/87 *Exécutif régional wallon and SA Glaverbel v Commission of the European Communities*. [1988] ECR 1573, para 20–22, that "a project may not be described as being of common European interest for the purpose of that Article [107(3)(b)] unless it forms part of transnational European programme supported jointly by a number of governments of the Member States, or arises from concerted action by a number of Member States to combat a common threat such as environmental pollution".

<sup>20</sup> An example of local economic activity without trade effects is for example an amusement or sport facility that is built for the use of local residents and does not affect tourism (Commission decision N258/2000 Leisure pool Dorsten, 21.12.2000). It does not affect trade between member states.

## 2.2 Services of General Economic Interest (SGEI)

The prohibition on state aid under Article 107(1) TFEU is not absolute. In addition to the circumstances specified in Article 107(2) and (3), which are of general application, Article 106(2) TFEU provides for a specific, limited exception for SGEI. Under Article 106(2):

*Undertakings entrusted with the operation of services of general economic interest or having the character of a revenue-producing monopoly shall be subject to the rules contained in the Treaties, in particular to the rules on competition, in so far as the application of such rules does not obstruct the performance, in law or in fact, of the particular tasks assigned to them. The development of trade must not be affected to such an extent as would be contrary to the interests of the Union.*

Until the judgment of the Court of Justice in the *Altmark*<sup>21</sup> case in 2003, it was not fully clear whether a compensation granted by a public authority for the performance of SGEI came within the scope of Article 107(1) and so constituted state aid. The *Altmark* case lays down four cumulative conditions under which public service compensation does not constitute state aid<sup>22</sup>. Where these four criteria are not met, public service compensation does constitute state aid<sup>23</sup>. The General Court clarified that the purpose of the four *Altmark* conditions is exclusively that of the classification of the compensation as state aid or not, while Article 106 (2) constitutes the basis for the compatibility of financial compensation which do not comply with all those 4 conditions<sup>24</sup>.

According to Commission's unofficial definition SGEIs are economic activities that the member states identify important to citizens and that would not be supplied if there were no public intervention.<sup>25</sup> The common examples are transport networks, postal services and social services. For this article it was necessary to study if it is possible to count biodiversity and ecosystem services as SGEI and on what conditions the public funding is allowed.

As a point of departure, we can note that it is clear that production of biodiversity and ecosystem services is not sufficiently supplied. It is also clear that these services are important to all citizens and public intervention is necessary because markets are not functioning well on this respect. So it seems that it would be possible to nominate these services as SGEI. Then it would be easier to increase supply by financing through the public budget. In fact, as demonstrated earlier in this article, commission has accepted the idea that some nature conservation measures taken by private parties can be seen as SGEI because they genuinely serve the interest of citizens<sup>26</sup>. However, whereas, within the agri-environmental schemes the activities which are beneficial for the

---

<sup>21</sup> Case C-280/00

<sup>22</sup> *First*, the recipient undertaking must actually have public service obligations to discharge, and the obligations must be clearly defined. *Second*, the parameters on the basis of which the compensation will be calculated must be established in advance in an objective and transparent manner. *Third*, the compensation cannot exceed what is necessary to cover all or part of the costs incurred in the discharge of public service obligations. *Fourth*, where the undertaking which is to discharge public service obligations is not chosen pursuant to a public procurement procedure which would allow for the selection of the tenderer capable of providing those services at the least cost to the community, the level of compensation needed must be determined on the basis of an analysis of the costs which a typical undertaking, well run and able to meet the necessary public service requirements, would have incurred in discharging those obligations.

<sup>23</sup> [http://ec.europa.eu/competition/state\\_aid/legislation/sgei\\_report\\_en.pdf](http://ec.europa.eu/competition/state_aid/legislation/sgei_report_en.pdf).

<sup>24</sup> Case T-354/05, *TFI* [2009] ECR II-00471, point 130-135.

<sup>25</sup> See further on SGEI in Siikavirta (2011).

<sup>26</sup> NN 8/2009 Transfer of natural protection areas to new owners and measures for biodiversity, para 58.

environment cannot be carried out by the state, but can only be carried out by undertakings on a voluntary basis - the SGEIs are tasks on which Member States have imposed a special public service obligation. The SGEI relate to operations which serve the whole society and strive to fulfil the functions of the Member State, which then may entrust these tasks to other entities. In this sense, the SGEI differs from a classical environmental aid measure.

Public financing of SGEI is allowed if it impartial and does not overcompensate the costs and reasonable profit of the activity. Costs may accrue due to production cost (working time, use of machinery etc.) or due to the lost of expected business profit (opportunity cost). Costs may differ a great deal. The nature conservation or ecosystem services may affect plans for forestry, agriculture, construction, mining or some other economic activities.<sup>27</sup>

### **3 Policy Instruments likely to Constitute State Aid**

As a response to the pressing needs to combat the continuing loss of biodiversity, new economic policy instruments have been developed. In this chapter we first present a number of key economic instruments discussed as possible policy response to environmental problems and then analyse the relationship between the instruments and state aid regulation, with the aim to assess which of the selected biodiversity conservation instruments are likely to constitute state aid in the meaning of article 107 TFEU.

We have chosen environmental taxes, tax reliefs, environmental subsidies, tradable permits, habitat banking, environmental certificates and ecological fiscal transfers as examples of instruments. It should be noted that variation between individual applications of the same instrument may be significant in legal terms and hence this chapter aims to provide a coarse analysis before we will study in details some examples.

First, one can exclude *environmental taxes, fees and charges* from the definition of state aid for no grant from state's resources occurs. State aid comes into question only when taxes, fees and charges are distortionary meaning that some economic enterprise does not have to pay these remittances. A tax to some firms is a subsidy to competitors who do not have to pay.<sup>28</sup> Having said this, it seems clear that *tax reliefs* as well as *subsidies* based on public financing constitute a grant through state resources. In addition, if the measures are selective, they most probably constitute state aid.

There is no legal difference whether the aid is granted by state or by a lower governance entity, such as a county, federal authority, municipality or any other body using public authority. However, transfer of assets between public authorities is not generally regarded as aid. *Ecological fiscal*

---

<sup>27</sup> Currently it is common to compensate the lost value of timber, but it may be necessary to compensate also other economic values.

<sup>28</sup> Case C-169/08, 17.11.2009.

*transfer*<sup>29</sup> is state aid if it ends up giving advantage to certain undertakings. As a conclusion, if a municipality addresses the assets that it has received as central government transfers forward to certain undertakings, the measure is state aid and the municipality is the “aid-official”. If however, the assets received as central government transfers are not delivered forward to undertakings (e.g. the measure does not provide tax reliefs or any other subsidies) but are rather just used to level the loss of municipals tax income<sup>30</sup> caused by land use restrictions, the measure is presumably not regarded as state aid (in practice this might allow keeping municipal tax levels low and hence also benefit local undertakings).

*Tradable permits*, and possibly also *habitat banking*, may constitute state aid if the trading instruments set by the officials are seemingly artificial, discriminatory or create economic advantages. The Commission considers the emission trading instruments (and possible habitat banking instruments) such as quotas, allowances, certificates and credits to be intangible assets for recipients if they are tradable in the market. However, when the state on its own initiative allocates such assets free of charge, the allocation can constitute state aid<sup>31</sup>.

As such, *certificates* do not generally constitute state aid if the measure does not use funds from the state budget.<sup>32</sup> In its decision on the green oil certificate system in Sweden (N789/2002) the Commission held that an advantage given to the producers of green oil through granting them free oil certificates, which they can sell to the suppliers on the (future) green certificate market, does not constitute state aid.<sup>33</sup> For the grant of free green certificates does not cause revenue forgone to the state. Neither does the obligation by the state for licensed electricity suppliers to purchase a certain amount of green certificates (comparable to the obligation to purchase electricity produced from renewable energy sources at fixed minimum prices<sup>34</sup>). However, if the certificate scheme includes sanctions for omission to buy a certain amount of certificates and suppliers who do not have sufficient amount have to pay a fine to a fund from where those payments are granted forward to the

---

<sup>29</sup> Investments and maintenance of socio-economic public sector functions of urban agglomerations (such as schools, hospitals, and theatres) have long been a justification for targeted fiscal transfer schemes. Targeted fiscal transfers are a suitable instrument for internalizing positive externalities. In the case of ecological fiscal transfers, this means greening the public expenditure. Protected areas, for example, involve land-use restrictions that may force municipalities to forego development opportunities that would generate communal income. If transfers are made to compensate for these protected areas, their acceptance could be increased both at the municipal decision-making level, and by citizens in the area. Brazil and Portugal have implemented ecological fiscal transfers, compensating municipalities for land-use restrictions imposed by protected areas (*Ring* 2008, p. 143–150).

<sup>30</sup> See Act 1704/2009, chapter 7. (Laki kunnan peruspalvelujen valtionosuudesta)

<sup>31</sup> See National allocation plans for Emissions trading:

[http://www.europa.eu.int/comm/environment/climat/emission\\_plans.htm](http://www.europa.eu.int/comm/environment/climat/emission_plans.htm). Last visited on 22.10.2010.

<sup>32</sup> In order to decide that the notified measure on green certificates constitutes state aid, the Commission has to determine whether state resources are at stake. See eg. Commissions decision N 504/2000, p 11.

<sup>33</sup> "De svenska myndigheternas avsikt är att ge producenter av grön elektricitet extrainkomster genom försäljning av elcertifikat på marknaden. Systemet utgör därför en förmån för dem. Orsaken till att förmånen ges till dessa producenter är att det av miljöskäl är önskvärt att höja den gröna elektricitetens konkurrenskraft på den avreglerade elmarknaden. En åtgärd utgör emellertid inte statligt stöd om det inte är fråga om statliga medel. Kommissionen har redan slagit fast att utdelning av gratis elcertifikat till producenter inte innebär någon förlust av statliga medel, eftersom certifikaten endast är ett bevis på att grön el har producerats. Inte heller i föreliggande fall tas medlen från statsbudgeten, utan dessa betalas av alla elförbrukare – myndigheter, företag och enskilda – som omfattas av skyldigheten att köpa elcertifikat. Elleverantörerna hanterar endast inköpsskyldigheten för slutkonsumenterna och får en hanteringsavgift för dessa tjänster". Statligt stöd N 789/2002 – Sverige Elcertifikatsystemet (C(2003)382fin).

<sup>34</sup> See case C-379/98, *PreussenElektra*. [2001] ECR I-02099.

producers to provide them a "guarantee price", such fund-based procedure may constitute state aid.<sup>35</sup>

Especially habitat banking and certificate schemes may coexist with some kind of *fund-based financing*, which for that reason is target for closer scrutiny. Also, depending on the amount of state's control, fund-based financing may be regarded as given through state resources. However, interpretations vary. As enshrined in *van Tiggele*, the Court also confirmed in the *Sloman Neptun*<sup>36</sup> that "advantages granted from resources other than those of the state do not fall within the scope of the provisions in question". In some cases the Commission has regarded fund-based measures as aid, yet compatible with the common market in the light of environmental protection. In Dutch case the Commission authorised two measures called MEP (*Milieukwaliteit van de ElektriciteitsProductie* — Environmental quality of electricity production), aimed at stimulating renewable energy<sup>37</sup> and combined heat and power (CHP) production<sup>38</sup>. The purpose of this subsidy scheme was to increase supply. The scheme was financed through a compulsory contribution by electricity consumers in the form of an increased connection fee that was fed into a fund. The fund will favour Dutch producers of renewable electricity and of CHP electricity who feed their electricity into the high-voltage grid. The Commission noted that the fund was set up by the state, is managed by the state company and will support only Dutch producers of renewable electricity and of CHP electricity. The Commission therefore concluded that the scheme constituted state aid within the meaning of Article 107(1) of the Treaty and thus assessed the measures in the light of the Community guidelines on state aid for environmental protection.<sup>39</sup>

In summary, state aid regulation is relevant for a number of economic environmental policy instruments such as tax reliefs, subsidies, fiscal transfers, fund-based financing, tradable permits and liability compensation schemes, because they may be considered state aid in the meaning of the Article 107(1) TFEU. Each instrument need to be assessed case-by-case and it is not possible to draw categorical conclusions with regard to these categories of the instrument. For example some forms of ecological transfers would clearly be state aid whereas some others not. On the other hand, taxes, fees and charges are unlikely to be state aid. Once a measure is considered state aid, it must then be decided whether it still could be - and on what conditions - compatible with the common market in the light of environmental protection.

#### **4 Payments for ecosystem services and nature value trading in land purchase**

In contrast to the above described relatively flat economic instruments, new environmental policy instruments are more targeted. Payments for environmental services (PES) and nature value trading applied to land purchase apply strict criteria and justify selection procedures with cost-effectiveness

---

<sup>35</sup> See Commission decisions N 789/2002 and N 504/2000.

<sup>36</sup> Joined Cases C-72/91 and C-73/91 *Firma Sloman Neptun Schiffahrts AG v Seebetriebsrat Bodo Ziesemer der Sloman Neptun Schiffahrts AG*, [1993] ECR I-00887, para 19.

<sup>37</sup> N 707/2002, MEP - Stimulating renewable energy, 25.6.2003.

<sup>38</sup> N 708/2002, MEP – Stimulating CHP, 25.6.2003.

<sup>39</sup> European Commission, XXXIIIrd Report on Competition Policy 2003, p. 102.

of the use of public funds<sup>40</sup>. An additional reason for the targeting of the measures is that the nature values to be protected are unevenly distributed across the landscape and the land-owners. These instruments have become popular means of biodiversity conservation first outside Europe and recently also in the European states<sup>41</sup>. With the legal restrictions on state aid, these instruments are particularly interesting, as they are directly targeted at protecting the environment, which is of common interest. Although the Commission is bound by the guidelines and notices that it issues in the area of supervision of state aid, it has a wide discretion. Exercising the discretion involves economic and social assessments. We will analyse the Commission's practice regarding PES and nature values trading to scope the state aid challenges that these conservation instruments deal with.

PES-terminology is applied to a wide range of very diverse situations and there is no single definition of PES. According to *Wunder*<sup>42</sup> a PES scheme is a voluntary transaction where a well-defined environmental service (or a land use likely to secure that service) is being "bought" by at least one buyer from a (minimum of one) environmental service provider if, and only if, the environmental service provider secures environmental service provision. PES schemes redistribute national wealth by making direct payments or compensations<sup>43</sup> to those who produce the conservation benefit. In the past decade, PES schemes have rapidly developed around the world and they encompass a diversity of mechanisms. In the following, some cases from different EU Member States are scrutinized to introduce the challenges with payments for environment-related services. In the following, we analyse PES application experiences and their conflict with the state aid law in Germany, Finland and the Netherlands.

### **German Nature conservation areas**

The state aid programme *NN 8/2009 – Germany Nature conservation areas* consisted of the gratuitous transfer of federally-owned natural heritage sites and the funding of large-scale nature conservation projects. Pursuant to the description of the scheme, valuable natural heritage sites existed on federally-owned land in Germany. However, due to budgetary constraints the German authorities found it increasingly difficult to finance the long-term upkeep and development of these areas wherefore they needed to be transferred to ensure their proper upkeep. Experience gathered had shown that, where such areas were sold to private individuals, their naturalistic value was significantly degraded over the years. Besides, nature conservation organizations did not have the financial means to purchase the federally-owned land and to pay for follow-on costs.

---

<sup>40</sup> Government Decision in Principle on an Action Programme to Protect Biodiversity in Forests in Southern Finland 2008-2016 (METSO-Programme). 27 March 2008; Pascual, U., Muradian, R., Rodríguez, L.C., Duraiappah, A. 2010. Exploring the links between equity and efficiency in payments for environmental services: A conceptual approach. *Ecological Economics* 69, 1237–1244.; Primmer, E., Paloniemi, R., Similä, J., Barton, D. 2011. Institutional evolution in forest biodiversity conservation payments. 4th ESP International Conference Ecosystem Services: Integrating Science and Practice. Wageningen 4-7.10.2010.

<sup>41</sup> Farley, J., Costanza, S. 2010. Payments for ecosystem services: From local to global. *Ecological Economics* 69, 2060–2068.

<sup>42</sup> *Wunder, Sven* 2005: Payments for Environmental Services: Some nuts and bolts. CIFOR Occasional Paper No. 42.

<sup>43</sup> There is an important, yet rather poorly known distinction between payments as an incentive and as compensation. See more in Pascual et al., 2010; *Vatn, A.* 2010. [An institutional analysis of payments for environmental services](#). *Ecological Economics*, 6:6, 1245-1252..

Germany therefore decided not to sell the areas concerned, but to transfer responsibility for the conservation of these areas of outstanding naturalistic value to the Länder and the Deutsche Bundesstiftung Umwelt (DBU, German Environment Foundation). The Länder was entitled to further transfer these areas gratuitously to nature conservation organizations. While ownership of the land was transferred to the recipients free of charge, all other costs related to the transfer (for example surveying costs and taxes) as well as maintenance costs and inherited pollution risks were borne by the recipients of the areas. The federal programme for the establishment and protection of valuable natural areas and landscapes of national importance, aimed to finance projects on conservation of landscapes and natural heritage sites. The main aim of the measures was the maintenance of biodiversity.<sup>44</sup>

In its assessment the Commission held that the nature conservation entities were undertakings<sup>45</sup> and that the measures constituted state aid<sup>46</sup>. The Commission considered that a necessary precondition for qualifying a measure as services of general economic interest (SGEI) is that it genuinely serves the interest of citizens. The conservation tasks entrusted by Germany to the nature conservation entities pursued objectives which are in the interest of society as a whole, namely the preservation of intact habitats of outstanding naturalistic value for future generations. These tasks, which can be construed as services rendered to all citizens, clearly fall within the remit of the state acting as public authority, which however may find it appropriate to entrust them to other entities, for example for budgetary reasons. "In that sense, the scheme differs from a classical environmental aid measure: in the latter case the activities which are beneficial for the environment cannot be carried out by the state, but can only be carried out by undertakings on a voluntary basis". Therefore, the Commission accepted that the conservation tasks at issue may constitute a service of general interest. The Commission assessed the compatibility of the aid on the basis of the post-Altmark package<sup>47</sup> and concluded that the measure was compatible with the common market.

The separation between the tasks of the scheme and a classical environmental aid measure seems rather artificial, since the ownership of the land was transferred to the recipients. However, as will become evident in the following, the agrarian function of a farmer's land cannot be disconnected from its recreational or natural functions. Hence, the agri-environmental aid measures have to be assessed under the agriculture and forestry aid guidelines (not on the basis of the post-Altmark package).

### **Southern Finland Forest Biodiversity Programme**

---

<sup>44</sup> NN 8/2009, points 8–17.

<sup>45</sup> "According to settled case-law, any activity consisting in supplying goods or services on a given market is an economic activity. The Commission considers that, in the case at hand, activities like sales of wood, leases of land and tourism must be classified as economic in nature. The German nature conservation entities concerned by the notified measures should therefore be considered as undertakings within the meaning of Article 107(1) of the EC Treaty insofar as they exercise these activities", point 41.

<sup>46</sup> NN 8/2009, points 43–52.

<sup>47</sup> Public service compensation which cannot be qualified as non-aid on the basis of the Altmark criteria may, however, be found compatible if it complies with the conditions laid down in the Community Framework for state aid in the form of public service compensation. Community Framework for state aid in the form of public service compensation (OJ C 297 29.11.2005).

The Southern Finland Forest Biodiversity Programme (METSO), launched in 2002, introduced two new economic conservation instruments: nature values trading and bidding competition. They were based on voluntary offering of sites and negotiations on payments for conservation. The METSO nature values trading produced mainly ten year contracts where compensation was paid for loss of forest income, and to some degree, based on the biodiversity values on the sites.<sup>48</sup> The bidding competition was used to attract landowners whose lands hosted certain biodiversity values. They led through negotiations, mostly to permanent conservation or land purchase. The compensation or payment for these conservation contracts were tied either only to the potential forest revenue, or to that potential and to the conservation value (i.e. decayed wood, large aspen trees and such environmentally valuable elements have “a price tag”).<sup>49</sup>

These measures were in line with the 107(3)(c) TFEU under the previous guidelines on state aid for agriculture sector, pursuant to which "the Commission takes a favorable view of aid schemes which are intended to provide technical support in the agricultural sector. Such soft aids improve the efficiency and professionalism of agriculture in the Community, and thus contribute to its long-term viability while producing only very limited effects on competition. Aid may therefore be granted at a rate of up to 100 % of costs to cover activities such as dissemination of knowledge relating to new techniques, reasonable small scale pilot projects or demonstration projects".<sup>50</sup>

Since new guidelines on state aid for agriculture and forestry became effective 2007, this also caused changes on the aid measures within METSO program<sup>51</sup>. A Commission decision enshrines the compatibility of biodiversity conservation measures in a current state aid practice. *State aid No N 130a/2007 – Finland - Aid for forestry* involved maintaining and restoring ecological, protective and recreational functions of forests, biodiversity and healthy forest ecosystems. The Finnish authorities affirmed that grants were discretionary and granted only for schemes that were significant for biodiversity preservation, aid can never exceed 100% of the actual costs of the conservation and the authorities monitor that too high aid amounts will not be paid. The aid will only be granted for tasks that are started after the Commission's approval.<sup>52</sup>

The Commission regarded that the aid had an incentive effect and examined it against the background of Chapter VII of the Community Guidelines for State Aid in the Agriculture and

---

<sup>48</sup> Paloniemi—Varho 2009.

<sup>49</sup> Horne 2006, p. 171.

<sup>50</sup> Community Guidelines for State Aid in the Agriculture Sector (OJ C 28 1.2.2000), point 14.1. Pursuant to the new guidelines Community Guidelines for State Aid in the Agriculture and Forestry Sector 2007 to 2013 (OJ C 319, 27.12.2006) “aid granted for private landowners for pilot and demonstration projects connected to sustainable use of forests will now be authorised if the aid fulfils the conditions set out in point 107 of the guidelines. Accordingly, the Commission will examine such activities on a case by case basis and the Member State shall provide a clear description of the project including an explanation of the novel character of the project and of the public interest in granting support for it (for example because it has not been tested before) and demonstrate that the number of participating companies and the duration of the pilot scheme shall be limited to what is necessary for proper testing, the combined amount of aid for such projects granted to a company shall not exceed EUR 100 000 over three fiscal years, the results of the pilot scheme shall be made publicly available and that any other condition the Commission may deem necessary to avoid the scheme having a distorting effect on the market or amounting to operating aid”.

<sup>51</sup> A new METSO programme 2009-2016 institutionalizes voluntary site allocation and a possibility to make fixed term conservation contracts.

<sup>52</sup> N 130a/2007, paras 9–12.

Forestry Sector 2007 to 2013<sup>53</sup>. The aid scheme included plenty of measures, many of which were not related to biodiversity conservation, but other forest functions. The environmental aid will be viewed closer here.

In addition to the measures described above, an additional measure, called environmental aid for forestry, was adopted in Finland in 1996. According to § 16 of *Law on financing sustainable forestry*<sup>54</sup>, aid may be granted for commitments to improve biodiversity in forests or as compensations of excessive income loss from protecting particular habitats defined in the Forest Act on the basis of 10-year contracts. Such aid was regarded as being in accordance with point 176 of the Commission guidelines. Pursuant to that point, actions are compatible with Article 107(3)(c) of the Treaty if the aid meets conditions laid down in Article 47 of Regulation (EC) No 1698/2005. Accordingly, "payments shall be granted to beneficiaries who make forest-environmental commitments on a voluntary basis. These payments shall cover only those commitments going beyond the relevant mandatory requirements and shall be undertaken for a period between five and seven years. Where necessary and justified, a longer period shall be determined for particular types of commitments. The payments shall cover additional costs and income foregone resulting from the commitment made. Support shall be fixed between 40 and 200 Euros per hectare"<sup>55 56</sup>.

Biodiversity value -based payments are no longer granted, because the Commission will only authorise state aid for the additional costs and income foregone. Whereas in the pilot phase the compensation or payment for conservation contract was tied either only to the potential forest revenue, or to that potential and to the conservation value, the compensation is now based only on the market value of the timber in the area to be protected<sup>57</sup>. Aid exceeding the amounts fixed in the Annex to Regulation (EC) No 1698/2005 can in principle only be declared compatible with Article 107(3)(c) of the Treaty if granted for demonstrated additional costs and/or income foregone, in exceptional cases taking into account specific circumstances to be duly justified, in favour of commitments which lead to a demonstrable and significant positive effect on the environment.<sup>58</sup>

The Finnish authorities grant payments per contracted hectare of forest to beneficiaries who make forest-environmental commitments that go beyond the relevant mandatory requirements on a voluntary basis. However, the duration of these commitments is 10 years and the payment exceeds the maximum amount of 200 Euros in some cases. Since Finland's forests are located in subarctic area where the nature renews slowly, the populations of flora and fauna need enough time to recover. The Commission therefore assessed that only longer-lasting measures have a positive effect on biodiversity and approved the exceptional contract period of ten years. The payments may cover additional costs and income foregone resulting from the commitments made. On ground of calculation made by the Finnish authorities, some areas in Southern Finland have such high income value that the aid amount exceeds 200 Euros per year. The Commission considered that the limit of 200 Euros is exceeded only in some areas which are proved to be exceptionally valuable in

---

<sup>53</sup> N 130a/2007, paras 29–31.

<sup>54</sup> Law and decree on finance for sustainable forestry (Laki ja asetus kestävän metsätalouden rahoituksesta).

<sup>55</sup> (EC) No 1698/2005, article 47 & ANNEX.

<sup>56</sup> N 130a/2007, paras 48–49.

<sup>57</sup> N 130a/2007, para 20.

<sup>58</sup> Community Guidelines for State Aid in the Agriculture and Forestry Sector 2007 to 2013, point 177.

biodiversity and the compensation is based on actual income forgone. It is also required that such commitments would not be made on normal payment level. Hence, in such special situations caused by exceptional circumstances aid amounts exceeding 200 Euros per hectare may exceptionally be accepted.<sup>59</sup>

Pursuant to point 175(d) of the Guidelines state aid for restoration and maintenance of natural pathways, landscape elements and features and the natural habitat for animals, including planning costs, is compatible with Article 107(3)(c) TFEU. Aid can be accepted up to 100% of eligible costs. Thus, aid meant for biodiversity preservation in committed areas is compatible up to 100% of eligible costs and may be granted by the Finnish authorities.<sup>60</sup>

### **Agri-environmental schemes in the Netherlands**

Netherlands' case relates to both resources and barriers for establishing new agri-environmental schemes. Two local nongovernmental nature and landscape organizations and local agricultural nature association took the initiative to involve farmers in the management of the countryside to sustain the mixed landscape of cultural and natural grounds. Financial means were considered necessary to pay for their activities. Instead of working with a fixed set of measures, as in the traditional agri-environmental schemes, the initiative was intended to draw up "custom-made contracts" based on market-based prices. The introduction of the concept of green services (GS) reframed the maintenance of landscape and nature, from a costly external circumstance into a desirable social demand. Instead of compensating these activities as additional labor costs, they should be rewarded with a market-related price.<sup>61</sup>

The initiative was included in a pilot project by the Ministry of Agriculture, Nature and Food (ANF), which supported and facilitated bottom-up initiatives that sustained the quality of the rural landscape. However, the European Commission stated that market-based payments to farmers granted by governments would be considered as market distortion and therefore would not be allowed. Instead, payments could be based only on the loss of revenues and additional labor costs. These requirements could neither be changed because of international agreements<sup>62 63</sup>

Hence, to make certain that the pilot projects would meet the EU state aid requirements for farmers, the Ministry of ANF required that the GS projects would be notified to and approved by the Commission. Farmers could be paid only on the basis of a loss of revenues and additional labor costs and those contracts could be drawn up for a maximum period of six years. As contracts can be drawn up only for activities that "go beyond what is legally obliged" and the definition of what is legally obliged changes as rules are updated, contract periods could not exceed this period.<sup>64</sup>

---

<sup>59</sup> N 130a/2007, paras 50–52.

<sup>60</sup> N 130a/2007, paras 50–54.

<sup>61</sup> Zwaan—Goverde 2010, p. 771–772.

<sup>62</sup> WTO trade agreements.

<sup>63</sup> Zwaan—Goverde 2010, p. 772–773.

<sup>64</sup> Zwaan—Goverde 2010, p. 774.

These requirements were not readily accepted by all local or regional actors involved in the pilot for they wanted to work on the basis of market-based prices and to increase the duration of the contracts up to ten years. Therefore, the actors contracted a private consultancy office which advised that they should qualify the GSs as "services of general interest" (SGEI) that would meet the so-called "Altmark" criteria. The consultancy office suggested that the agrarian function of a farmer's land would be disconnected from its recreational or natural functions. By separating these functions it would become possible to bypass the EU state aid requirements for farmers as farmers would not carry out any agrarian activities on this recreational or natural land, and would formally only be a landowner of the recreational or natural land. By using this construction, GSs could be qualified as services of general interest, to which the state aid requirement for farmers would not apply. In addition, the suggestion was made to establish a "landscape fund" that would be entrusted in the care of independent actors who could draw up the contracts with farmers for these GSs. The landscape fund would be "filled" with both public and private money from local businesses or profits from building projects. Governmental contributions were considered to be important especially at the start of the fund to cover overhead costs.<sup>65</sup>

The European Commission however, stressed that payments had to be based on a "loss of revenues and additional labor costs" and argued that the land use of a farmer is too interconnected to create a separation into different functions. It would be impossible, for example, for the Commission to check whether a farmer leaves a piece of land fallow for bird breeding, or whether this allows him to access his arable land more easily.<sup>66</sup> In its decision on *state aid programme NN 8/2009 – Germany Nature conservation areas* the Commission also stated, that if Member States define services of general economic interest for sectors of the economy which have been the object of harmonisation measures at EU level, then these services must be reviewed with special care in order to avoid inconsistencies. For the forest sector is harmonised and state aid for forestry is subject to the "Community guidelines for state aid in the agriculture and forestry sector 2007 to 2013", the Commission therefore examines first whether the agriculture and forestry guidelines are applicable to the case at hand. The agriculture and forestry aid guidelines apply to all state aid granted in connection with activities related to the production, processing and marketing of agricultural products<sup>67</sup> and under them state aid is permitted to support the ecological, protective and recreational functions of forests.<sup>68</sup> That being the case, the agri-environmental aid measures in question were assessed under the Agriculture and Forestry Guidelines.

If the landowner gave up all the forestry in his land (i.e. gave up the production, processing and marketing of agricultural products) and thus became only a landowner of the recreational or natural land, was it logical that he could then, by fostering naturalistic values for future generations, start producing services of general economic interest (SGEI). Also, if certain areas in landowners land were already protected by law, would the silvicultural tasks in these areas serve objectives that are in the interests of society as a whole? For example, the tasks in favour of Habitat Types, which are

---

<sup>65</sup> Zwaan—Goverde 2010, p. 774.

<sup>66</sup> Zwaan—Goverde 2010, p. 776.

<sup>67</sup> See the Annex I of the Treaty.

<sup>68</sup> NN 8/2009 – *Germany Nature conservation areas*, point 59.

of great value for future generations, increase the *public goods*<sup>69</sup> which fall within the remit of the state acting as public authority. When Member States enjoy a wide margin of discretion when deciding whether and in what way to finance the provision of services of general economic interest<sup>70</sup> they should really take all advantage of that. At least the possibility to produce SGEI also in private natural (forestry-free) lands should be thoroughly investigated.

## 5 Discussion and conclusions

Need for new economic biodiversity and ecosystem service instruments is obvious and generally acknowledged. An efficient solution would be to launch market-based, union-wide programs, such as a habitat bank and offset scheme to reduce the biodiversity loss through obliging developers to purchase credits from a habitat bank. From State Aid Law perspective this would not cause any problems, because the State Aid Law, by definition, regulates the economic instruments of Members States.

In accordance with its Treaties, the European Union shall establish an internal market which shall work for the sustainable development based on balanced economic growth and a high level of protection and improvement of the quality of the environment. So that the market economy is able to improve the living conditions to the benefit of EU citizens in a sustainable manner, the legal frames must be built to guarantee this. Ecologically rich environment not only is a prerequisite for healthy and wealthy living, but it also enables innovates and new markets. That is why it is vital that the environmental protection requirements are integrated into the definition and implementation of all Union's policies and activities, including state aid policy. The sustainable values to strive for can be shown effectively with the help of economic incentives. By aiding actions that conserve nature, also by giving compensation in money for nature values, states can but bear their share for the public goods, also act as forerunners for the future markets for ecosystem services.

Our analysis of state aid principles and economic instruments for biodiversity conservation in Member States points to some challenges in meeting all conditions and goals of competition policy and conservation policy. However, some instruments, like environmental taxes, fees and charges do not raise problems under the state aid regulation, due to their non-discriminatory character. Many forms of ecological fiscal transfers, certificates and habitat banking are generally either so flat that they are not considered to distort competition or their incentive system is sufficiently market-based to comply with state aid principles. The most problematic instruments are tax reliefs and subsidies, because many forms of them can be considered discriminatory.

The problem is that tax reliefs or subsidies would be, in principle, fully forbidden. Yet, the Commission has allowed Member States to grant payments to farmers who make agri-environmental commitments on a voluntary basis. This could be called "beneficiary pays" principle because the beneficiary is the public, all citizens. The government is consequently meeting some

---

<sup>69</sup> Public goods are goods which are beneficial for society but which are not normally provided by the market given that it is difficult or impossible to exclude anyone from using the goods (and hence making them pay for the goods).

<sup>70</sup> State Aid Action Plan, p. 9–10.

costs of conservation on behalf of the general community. The problem is that incentives of biodiversity policy which are differentiated according to their contribution to biodiversity or ecosystem service conservation can be seen as non-discriminatory. The ecological effectiveness of agri-environment schemes is restricted as long as the payments are defined on other basis than on the nature values that they protect or enhance. If nature values were included in the agri-environmental payments, the landowners who possess the ecologically most valuable sites would have greater incentive to commit to conservation in comparison to those who have less valuable sites. This would also be effective, not only from an environmental point of a view, but also economically. However, this would precondition that the guidelines pursuant to which state aid is allowed possessed more flexibility. According to the agriculture and forestry aid guidelines the payments to farmers could – and should - be based only on the loss of revenues and additional labour costs. Another way to increase the active nature conservation measures and possible also the supply of ecosystem services would be to frame these services as services of general economic interest (SGEI), which fulfil the Altmark-criteria used in EU.

Green services are another major issue. This issue is complicated because the WTO trade agreements also regulate it and the Commission claimed that “green service” payments to farmers fall outside the so-called “green box” which includes those agriculture related subsidies that are not restricted by trade agreements as defined under the terms of the Uruguay round of the World Trade Organization.<sup>71</sup> This is a significant hindrance for policy development and might remain so until the concept of green services / ecosystem services is developed clearer. One way to overcome this hindrance would be to find a way to make a distinction between agricultural<sup>72</sup> and non-productive functions. If the services are related to agricultural function, the payments for them are most probably restricted.

---

<sup>71</sup> Letter of the Minister of ANF to the Chairman of the Second Chamber, 13 October 2005, 30. *Zwaan—Goverde* 2010, p. 773. Fouilleux E, 2004, ‘CAP reforms and multilateral trade negotiations: another view on discourse efficiency’ *West European Politics* 27 p. 247-248.

<sup>72</sup> See OJ C 83/331 List referred to in Article 38 of the Treaty on the Functioning of the European Union.